**Stations Review Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Q4 Interim Review Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pr: \_\_\_\_\_\_**

Directions: You will have exactly 15 minutes to work at each station. Each station consists of 8 problems. You should only be working on problems for that station. You may use your notes and work with other students on these problems. Write final answers to your stations work on this sheet. Include all units in your final answers. Pay attention to whether the question asks for exact or approximate answers.

**Station 1: Triangles and their Properties \_\_\_\_\_/8**

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| 1) | 2) | 3) | 4) |
| 5) | 6) | 7) | 8) |

**Station 2: Perimeter and Area \_\_\_\_\_/8**

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| 1) | 2) | 3) | 4) |
| 5) | 6) | 7) | 8) |

**Station 3: Grab Bag! \_\_\_\_\_/8**

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| 1) | 2) | 3) | 4) |
| 5) | 6) | 7) | 8) |

**Station 1: Triangles and their Properties**

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| 1) Find the value of ‘Y’ in the triangle below. Leave your answer in radical form. | 2) Which of the following will solve for the value of x?    A.  B.  C.  D. |
| 3) In the figure below, ABC is a right triangle with a right angle at C. Which of the statements about this figure is NOT correct?  A   1. sin A =   10   1. cos A =   8   1. cos B =   B  6  C   1. tan A = 2. tan B = | 4) In the figure below, lines PQ and TS are parallel, and lines QS and PT intersect at point R. The measure of PRQ = 34 and the measure of p = 17. Find the measure of S. |
| 5) BE is parallel to CD. Find the measure of BC. | 6) Find the perimeter of the triangle. Round to the nearest tenth. |
| 7) What is the cosine of A?  A  25  C  7  B | 8) An angle in a right triangle has a measure.  If sin =, then tan= ? |

**Station 2: Perimeter and Area**

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| 1)  Screen Shot 2012-03-11 at 5 | 2) In the figure below, ABCD is a square. Points on each pair of adjacent sides of ABCD are connected to form 4 congruent right triangles with one leg four times as long as the other, as shown below. What fraction of the area of square ABCD is shaded?  4x  x  B  A  C  D |
| Use the scenario below for questions 3 and 4.  The box for a 16 inch pizza (a pizza 16 inches in diameter) from Papa John’s is square-shaped and leaves room for one inch on each side of the pizza. | |
| 3) How many square inches is the area of the base of the pizza box? | 4) If an advertisement is printed on the base of the pizza box, what is the value of the area that will be seen before the pizza is eaten? Round to the nearest tenth. |
| 5) A park wants to put a fence around a baseball field in the shape below. Each straight side of the fence is 80 feet long, and the rounded side is an arc that measures 90. How many feet of fencing does the park need to purchase? Leave your answer in terms of pi. | 6) Two of the sides of rectangle ABCD are 4 units longer than the other two sides. If the perimeter of the rectangle ABCD is 88 units, what is the area of the rectangle? |
| 7) An outdoor pool is 13-feet-by-10-feet. The owners want to double the area of the pool, extending the previous 10-foot width by 3 feet. By how many feet will the 13-foot length increase? | 8) If one diagonal of a rhombus is 18 inches and the other is 80 inches, what is the perimeter of the rhombus? |

**Station 3: Grab Bag!**

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| 1) Quadrilateral 1 is a rectangle and Quadrilateral 2 has four right angles. Which of the following must also be true?   1. Both shapes are squares 2. Both shapes are parallelograms 3. I only 4. II only 5. I and II 6. None of the above | 2) A thumbnail of a photographer’s image shows a certain building to be 5 cm tall. In actuality, the building is 700 meters tall. What is the scale factor of the building to the thumbnail? |
| 3) In the standard (x, y) coordinate plane, a certain line is represented by the equation 6x + y = – 3. At what point will the line cross the x-axis? Write your answer as a coordinate point. | 4) Find the slope of the line that goes through the points (0, 5) and (-3, -4). |
| 5) The minute and hour hands on the clock on the wall originate at the center of the clock and reach to the outer edge of the clock. The hands of the clock are each 4 inches long. When it is 6:00 pm, what is the length of the arc created by the minute hand the hour hand? Round to the nearest tenth. | 6) The Jenner family was planning on taking a road trip from Chicago to Milwaukee, WI, which is 250 miles. Instead, they decided to go to Springfield, IL, which is 730 miles from Chicago. On a certain map, each inch equals 60 miles. On that map, how much longer is the trip to Springfield than the trip to Milwaukee? |
| 7) For all nonzero values of , , and , the expression is equivalent to what? | 8) In the standard (x, y) coordinate plane, line AB has endpoints A (3, 6) and B(-1, 4). If the midpoint of AB has coordinates (x, y), what is the value of x + y? |